## STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

DIVISION OF WILDLIFE CONSERVATION

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## Excellence in Wildlife Conservation and Public Service

TO:

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FROM:

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DATE:

27 July 2010

SUBJECT: 2010 Nelchina Caribou photo-census, available surplus, and hunt recommendations

After counting the photos from the 2010 Nelchina Caribou census – the final herd count is 44,954. Our estimate will not be final until later this autumn when the fall composition survey is completed. Based on the current estimate, we should harvest 1500 bulls and 800 cows this regulatory year.

We need a high harvest this year to bring us back closer to the population objective range of 35,000-40,000. Population modeling during the last couple of years indicated we had more caribou than we were counting during summer counts. We were able to complete a photocensus this year which provided confirmation of increased numbers of caribou. With the high calf ratio observed this spring we estimate 14,500 calves in the herd at this time. It is imperative that we harvest a large number of caribou this regulatory year, otherwise we will be facing too many caribou on the range.

A harvest of 2,300 caribou is needed this regulatory year to keep the population closer to objectives and prevent overstocking which would result in poor animal condition, decreased productivity, and increased potential for severe population decline. In addition, too many caribou on the range could lead to overgrazing and reduced capability of the habitat to support caribou.

It is highly unlikely that a winter hunt alone can reliably provide the needed harvest. On average during past years, twice as many caribou have been taken during the autumn compared to the winter hunt. Caribou are widely distributed in the autumn providing good access during favorable hunting conditions. Hunting conditions are less favorable in winter. More importantly, caribou distribution is more variable in the winter and distribution can greatly affect the harvest. A substantial number of Nelchina caribou winter in areas far from access points and communities which reduces harvest. Some Nelchina caribou also winter on National Park Lands, which can greatly reduce harvest opportunities. In addition, Nelchina caribou have often wintered within the range of other herds such as the Mentasta Herd (which is closed to hunting for conservation reasons) and the Delta and Forty-mile herds (which usually reach harvest quotas in autumn and are closed in all or part of the winter). In the event of overlapping, harvest must be restricted or eliminated to prevent over-harvest of the herd closed to hunting. This is not a reliable option for taking a considerable number of Nelchina caribou.

A fall hunt is needed this regulatory year to ensure that harvest goals are met.